

ABSTRACT

Enhanced-performance sound source spatialization system

The present invention relates to an enhanced-performance sound source spatialization system used in particular to produce a spatialization system compatible with an integrated modular avionics (IMA) type system. It comprises:

- a filter database (13) comprising a set of head-related transfer functions (HRTF) specific to the listener,
- a data presentation processor (CPU1) receiving information from each source and comprising in particular a module (101) for computing the relative positions of the sources in relation to the listener and a module (102) for selecting the head-related transfer functions with a variable resolution suited to the relative position of the source in relation to the listener,
- a unit (CPU2) for computing said monophonic channels by convoluting each sound source with head-related transfer functions of said database estimated at said source position.

Figure 1